2007-08 Idaho 6th Grade Direct Mathematics Assessment

651

MR

STUDENTS DO NOT WRITE IN THIS AREA

FINAL

ROUND 1 T:___ R:___ ROUND 2 T:___ R:___

G O
M O

plain how you solved the problems on this
lator, show how you set up the math.

1. The 6th grade students at Grand View Elementary decided to sell the following items at stand during the Little League Baseball games.

Quantity	Type of Product	Cost
2	Box of Assorted Chips	$9.95 each box
1	Case of Root Beer	$7.90 each case
2	Box of Candy Bars	$10.98 each box
1	Container of Licorice (80 pieces)	$9.60 each container
1	Case of Spring Water	$4.95 each case

Advanced application of basic skills.

a) What was the total cost of the products they had available to sell at the Little League games? *Show or explain your work.*

19.90 Chips
+ 7.90 root beer
9.60 Licorice
4.95 water
21.96 candy bars
64.31

The total cost of the products were $64.31

10.98 9.95
10.98 x 2
21.96 9.90

b) How much more did the case of root beer cost compared to the case of spring water? *Show or explain your work.*

A case of root beer cost $2.95 more Then a case of water

6 18
X.910 (root beer)
-4.95 (water)
2.95

c) If 12 students share one container of licorice, how many pieces of licorice would each student receive? *Show or explain your work.*

Each student would recive about 6 1/2 pieces of licorice.

6.6
12|80.0
72
80
72
8

Advanced understanding of problem.

d) They sold 1/8 of the water at the first game and 3/8 of the water at the second game. What fraction of the water did they sell at the first two games? *Show or explain your work.*

They sold 1/2 of the water at the first 2 games

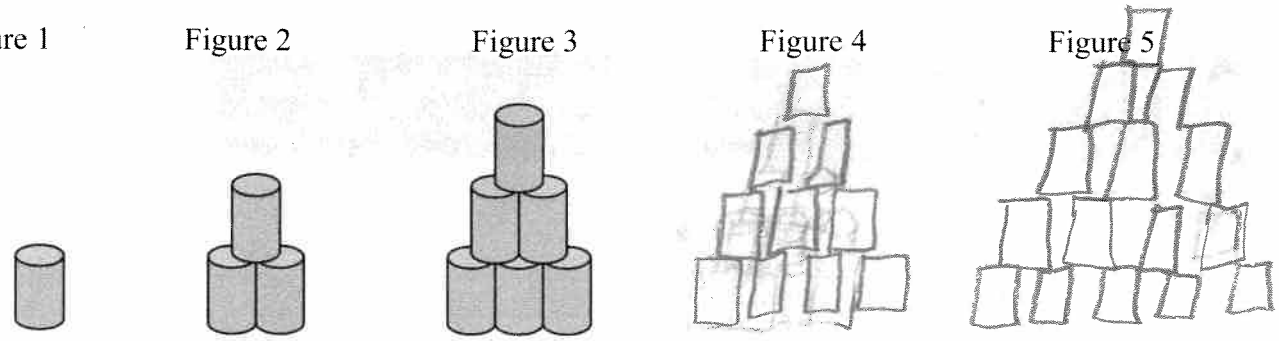
$1/8 + 3/8 = 4/8 \div 2/2 = \frac{2}{4} \div 2/2 = 1/2$

Appropriate processes accurately completed.

Read problems 2, 3, 4, and 5 on this and the next two pages. Select three problems to solve and answer ALL of the parts of the three problems.
Cross out the one problem that you do not choose to answer.

2. Todd is building a pyramid with pop cans. Continue the pattern started below by drawing figures 4 and 5. *Show or explain your work.*

a) Figure 1 Figure 2 Figure 3 Figure 4 Figure 5



b) Complete the table below. *Show or explain your work.*

Figure	Total Number of Cans
1	1
2	3
3	6
4	10
5	15
6	21

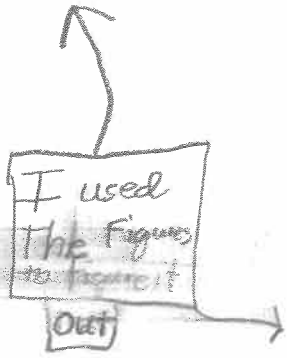
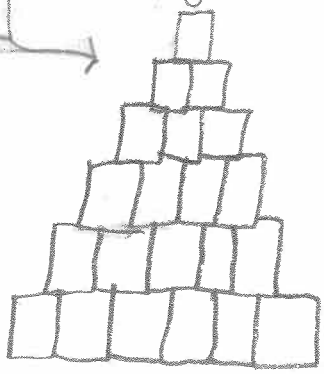


Fig. 6



Demonstrates effective problem-solving strategies.

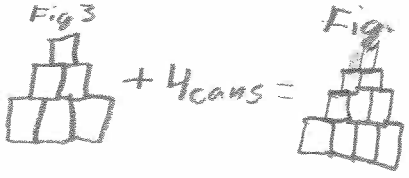
c) How many cans would be in Figure 8? *Show or explain your work.*

21
+ 7
28
+ 8
36

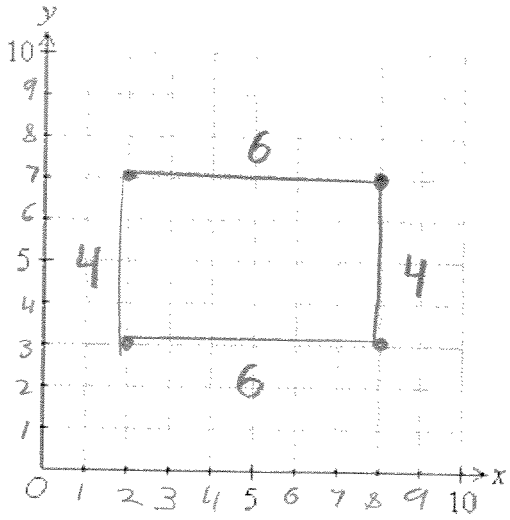
36 cans would be in Fig. 8

d) Explain the pattern used to complete the table.

The pattern used to complete the table is For Each Figure add the number of cans that matches The figure number. example-



3. Use the following grid to answer problem a, b, and c. **1 unit = 1 foot**



a) Plot the following points. Connect your points in order and identify the polygon. (2, 3), (2, 7), (8, 7), and (8, 3).

The polygon is a rectangle

Advanced understanding of symbols.

b) What is the perimeter of the polygon you formed? *Show or explain how your work.*

6 + 6 = 12 4 + 4 = 8 12 + 8 = 20

The perimiter is 20 feet

c) What is the area of the polygon you formed? *Show or explain how your work.*

The area is 24 feet²

4 x 6 = 24 L x W = A

A = 24

4. Kara baby-sits her neighbor's baby boy four days a week for 1 hour and 30 minutes each day.

a) If she begins baby-sitting at 3:45 P.M. what time does she finish baby-sitting each day? *Show or explain your work.*

She will be done at 5:15 P.M.

3:45 + 1:30 = 5:15

Minimal or non-existent errors.

b) What is the total time she baby-sits during a week? *Show or explain your work.*

She Baby-sits 6 hours each week.

1:30 > 3:00 > 6:00

1:30 > 3:00

1:30

c) Kara baby-sat one Saturday. She started at 9:20 A.M. and finished at 3:40 P.M. How long did she baby-sit? *Show or explain your work.*

She Baby-sat 6 hours and 20 min

9:20 + 40 = 10:00 + 60 + 60 + 60 = 1:00

1:00 + 60 + 60 = 3:00 + 40 = 3:40

5. Use the information in Mrs. Smith's Grade Book to answer the following questions.

Mrs. Smith's Grade Book

Student	Test 1	Test 2	Test 3	Test 4	Test 5
One	90	100	92	87	96
Two	100	90	87	88	85
Three	86	88	85	83	83
Four	83	86	86	75	85

Find the name of each student by using the following clues.

a) The **mode** of John's scores is 86. Which student is John? *Show or explain your work.*

b) The **median** of Maria's scores is 88. Which student is Maria? *Show or explain your work.*

c) Joe's scores have a 13-point **range**. Which student is Joe? *Show or explain your work.*